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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/022,622

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Ki-Taek Kim

SCH-0008

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02/09/2006

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EXAMINER

HAILE, FEBEN

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/022,622		KIM, KI-TAEK	
	Examiner		Art Unit	
	Feben M. Haile		2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-12 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 5-9, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on December 20, 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 11-12, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hann (US 6,751,233), hereinafter referred to as Hann in view of Yoo (US 6,175,567), hereinafter referred to as Yoo.

Regarding claims 1 and 15, Hann discloses controller monitoring and controlling the entire subscriber unit (**figure 2 units 50 & 25; a master controller**); first-in first-out memory (FIFO) manager connected said controller or transmitting and receiving cells to/from said controller (**figure 2 units 52 & 24 and column 3 lines 12-14; a UTOPIA 2 to UTOPIA 3 controller includes a FIFO buffer**); reception FIFO means for temporarily storing a cell received from a different ATM exchange and transmitting the stored cell to said FIFO manger (**figure 2 unit 23 and column 3 lines 15-30; data is sent from a modem to a UTOPIA 3 PHYS receiver, which in turn transmits it to the UTOPIA 2 to UTOPIA 3 controller**); and transmission FIFO means for temporarily storing a cell transmitted from said FIFO manager and transmitting the stored cell externally (**figure 2 unit 54 and column 4 lines 14-30; the UTOPIA 2 to**

UTOPIA 3 controllers transfers data from its buffer to a UTOPIA 3 PHYS transmitter).

Hann fails to teach discarding abnormal cells operation and recovering subscriber cell synchronization.

Yoo discloses a method of receiving a cell, checking if there is a cell start command and if cell synchronization is correct, and if there is no cell start command and the cell synchronization is not correct, then discard the cell (**column 6 lines 55-62**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method taught by Yoo into Hann's master controller. The motivation for such a modification being an efficiently system and method for managing cell in an ATM exchange.

Regarding claims 2 and 16, Hann discloses wherein said reception FIFO means includes four FIFOs for inputting and outputting cells (**column 4 lines 50-52; each UTOPIA 3 PHYS device has a two cell FIFO for reading and writing into; it would have been a manner of design choice to have more FIFOs**).

Regarding claims 3 and 17, Hann discloses wherein said transmission FIFO means includes four FIFOs for inputting and outputting cells (**column 4 lines 50-52; each UTOPIA 3 PHYS device has a two cell FIFO for reading and writing into; it would have been a manner of design choice to have more FIFOs**).

Regarding claim 4, Hann discloses a) transmitting a signal cell or control cell (**figure 2 units 23 & 24 and column 3 lines 15-30; data is sent from a modem to a UTOPIA 3 PHYS receiver, which in turn transmits it to a UTOPIA 3 controller**) and

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then sequentially checking a plurality of reception first-in first- out memories (FIFOs) to determine whether a new cell has arrived (**figure 2 units 23 & 24 and column 4 lines 30-45; the UTOPIA 3 controller polls the UTOPIA 3 PHYS receiver in order so see if there is any information to be transmitted**).

Hann fails to teach b), if there is no start cell (SOC) signal in an initial byte of a current cell under the condition that a cell synchronization loss signal is present in the current cell, or if the SOC signal is detected during transfer of the current cell, after said step a) is performed, recognizing that the current cell is abnormal; c), if the cell synchronization loss signal is abnormal at said step b), discarding the current cell and fully emptying an associated FIFO to recover cell synchronization.

Yoo discloses a method of receiving a cell, checking if there is a cell start command and if cell synchronization is correct, and if there is no cell start command and the cell synchronization is not correct, then discard the cell and clear the FIFO (**column 6 lines 55-65**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method taught by Yoo into Hann's master controller. The motivation for such a modification being an efficiently system and method for managing cell in an ATM exchange.

Regarding claim 10, Yoo discloses wherein the cell to be received has 64 bytes (**figure 6**).

Regarding claim 11, Yoo discloses wherein the current cell at said step b) is in any one of transmission or reception (**column 6 lines 55-65; a cell is received and checked for a cell start command and cell synchronization**).

Regarding claim 12, Yoo wherein the current cell at said step c) is in any one of transmission or reception (**column 6 lines 55-65; a cell is received, checked for a cell start command and cell synchronization, and discarded accordingly**).

Allowable Subject Matter

2. Claims 5-9 and 13-14 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Castellano (US 6,690,670), System and Method for Transmission Between ATM Layer Devices and PHY Layer Devices Over a Serial Bus

b) Kim (US 5,974,047), Method for Decoupling a Cell Rate in an Asynchronous Transfer Mode

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M. Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 6:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JH 0210312006



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER